

REMARKS

Status Of Application

Claims 1-46 are pending in the application; the status of the claims is as follows:

Claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32 and 34 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell "Cholesteric LCDs show images after power is turned off" (hereinafter "Powell") in view of U.S. Patent No. 4,802,739 to Iwamoto (hereinafter "Iwamoto") and U.S. Patent No. 5,463,408 to Mio (hereinafter "Mio").

Claims 3, 4, 7, 21 and 22 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of U.S. Patent No. 6,115,033 to Choi (hereinafter "Choi").

Claims 19, 27, 35, 37, 38, 40, 41, 43, 44 and 46 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Mio.

Claim 25 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Mio and U.S. 5,912,653 to Fitch (hereinafter "Fitch").

Claim 33 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Iwamoto and Mio as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32 and 34 above, and further in view of Fitch.

Claims 36, 39, 42 and 45 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Mio as applied to claims 19, 27, 35, 37, 38, 40, 41, 43, 44 and 46 above, and further in view of Iwamoto.

Drawings

To date, no Notice of Draftsperson's Patent Drawing Review has been received. Applicants respectfully request receipt of this document when it becomes available. Please note that the original drawings filed in the patent application are "formal" drawings.

Claim Amendments

Claims 1-4, 7, 12-20, 25, 27, 28, 31, 35, 37, 38, 40, 41, 43, 44, and 46 have been amended to clarify the language therein in a manner that does not affect the scope of the substance of the claims. These changes are not necessitated by the prior art, are unrelated to the patentability of the invention over the prior art, and do not introduce any new matter.

35 U.S.C. § 103(a) Rejections

The rejection of claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32 and 34 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Powell in view of Iwamoto and Mio, is respectfully traversed based on the following.

Claim 1 recites a liquid crystal display device comprising:

- a liquid crystal display which uses reflective type liquid crystal with a memory effect;
- a driving circuit which performs image writing on the liquid crystal display;
- a power supply circuit which supplies electric power to the driving circuit, the power supply circuit including one element selected from the group consisting of a booster circuit and a DC/DC converter; and
- a controller which inactivates at least part of the power supply circuit after completion of the image writing.

That is, the power supply circuit of the liquid crystal display device of claim 1 is inactivated by the controller **after completion of image writing**.

Powell discloses a liquid crystal display for displaying an image. The display is formed of a cholesteric bistable liquid crystal with a memory effect. Powell further

discloses that the cholesteric bistable liquid crystal with a memory effect displays the image when **power** to the display is turned off. Powell **does not** disclose or suggest a **power supply circuit** which supplies electric power to the driving circuit, the power supply circuit including one element selected from the group consisting of a **booster circuit and a DC/DC converter**.

As acknowledged on page 2 of the Office Action, “Powell does not explicitly disclose the use of a booster circuit”. As acknowledged on page 3 of the Office Action, “Powell does not disclose using a specific method for turning the power off in the display device”. Actually, as acknowledged on page 3 of the Office Action, “Powell **does not** teach using any particular method for turning the power off”. Emphasis Added. More importantly, Powell **does not** disclose or suggest **inactivating at least part of the power supply circuit after completion of the image writing**.

Thus, the disclosure of Powell **does not** render the device claimed in claim 1 obvious. As claim 1 is not obvious, claims 2, 5, 6, and 8-14, which depend either directly or indirectly therefrom, are also not obvious with respect to Powell.

Iwamoto **does not** disclose or suggest **inactivating at least part of the power supply circuit after completion of the image writing**. Actually, Iwamoto **does not** disclose or suggest any processes after completion of image writing. Thus, claim 1 is not rendered obvious by Iwamoto. As claim 1 is not obvious, claims 2, 5, 6, and 8-14, which depend either directly or indirectly therefrom, are also not obvious with respect to the cited reference.

Mio teaches that during driving of a liquid crystal display, for review short time between scanning of one line and scanning of a next line, a liquid crystal power supply generation circuit 30 is cut off from ground, thereby causing a floating condition. Thus, Mio discusses a process performed **in the middle of** image writing, while the present invention discloses a process performed **after** completion of image writing. Mio **does not** disclose or suggest **inactivating at least part of the power supply circuit after completion of the image writing**. Thus, claim 1 is not rendered obvious by Mio. As

claim 1 is not obvious, claims 2, 5, 6, and 8-14, which depend either directly or indirectly therefrom, are also not obvious with respect to the cited reference.

As none of the cited references disclose or suggest **inactivating at least part of the power supply circuit after completion of the image writing**. Thus, claim 1 cannot be obvious over any combination of the cited references. As claim 1 is not obvious, claims 2, 5, 6, and 8-14, which depend either directly or indirectly therefrom, are also not obvious with respect to any combination of the cited references.

More specifically, any combination of the three cited references would not provide the liquid crystal display device of claim 1. On page 3, the Office Action states that it "would have been obvious to one of ordinary skill in the art to use Mio's power off method in Powell's invention to turn the power off since Powell does not teach using any specific method for turning the power off". However, even if Powell's invention and Mio's method are combined, the result would be very different from that of claim 1 of the present application. As discussed above, Mio discusses a process performed in the middle of image writing, while claim 1 recites a process performed after completion of the image writing. Therefore, even if Mio's teaching is combined with Powell's invention, the combination would arrive at a different technique from that of claim 1. Also, as discussed above, Iwamoto does not teach any process after completion of the image writing. Therefore, any combination of the three cited references, Powell, Mio, and Iwamoto, would not provide the liquid crystal display device of claim 1. Thus, claim 1 is not obvious over any combination of the cited references.

Claim 15 recites a portable electronic device comprising:

a liquid crystal display which uses reflective type liquid crystal with a memory effect;

a driving circuit which performs image writing on the liquid crystal display;

a power supply circuit which supplies electric power to the driving circuit, the power supply circuit including one element selected from the group consisting of a booster circuit and a DC/DC converter;

a controller which inactivates at least part of the power supply

circuit after completion of the image writing; and

a casing which encases the liquid crystal display, the driving circuit, the power supply circuit and the controller.

For the reasons disclosed above for claim 1, claim 15 is not obvious with respect to Powell, Iwamoto, or Mio, either singly or in any combination. As claims 23, 24, 26, 31 and 34 depend either directly or indirectly from non-obvious independent claim 15, they too are not obvious over any of the cited references either singly or in any combination.

Claim 16 recites a method for driving a liquid crystal display device provided with a liquid crystal display which uses reflective type liquid crystal with a memory effect, said method comprising the step of:

after completion of image writing on the liquid crystal display, inactivating at least part of a power supply circuit which supplies electric power to a driving circuit which performs the image writing, the power supply circuit including one element selected from the group consisting of a booster circuit and a DC/DC converter. Emphasis Added.

For the reasons disclosed above for claim 1, claim 16 is not obvious with respect to Powell, Iwamoto, or Mio, either singly or in any combination. As claims 17, 18, and 32 depend directly from non-obvious independent claim 16, they too are not obvious over any of the cited references, either singly or in any combination.

Claim 20 recites a method for driving a liquid crystal display device provided with a liquid crystal display which uses reflective type liquid crystal with a memory effect, said method comprising the steps of:

after completion of image writing on the liquid crystal display, inactivating at least a part of a power supply circuit which supplies electric power to driving circuit which performs the image writing, the power supply circuit including one element selected from the group consisting of a booster circuit and a DC/DC converter, and

inactivating at least part of an internal circuit of a data processing unit which is connected to the driving circuit. Emphasis Added.

For at least the reasons disclosed above with respect to claim 1, claim 20 is not obvious with respect to Powell, Iwamoto, or Mio, either singly or in any combination.

Claim 28 recites a liquid crystal display device comprising:

a liquid crystal display which uses reflective type liquid crystal with a memory effect;

a driving circuit which performs image writing on the liquid crystal display;

a data processing unit which is connected to the driving circuit;

a power supply circuit which supplies electric power to the driving circuit and the data processing unit, the power supply circuit including one element selected from the group consisting of a booster circuit and a DC/DC converter; and

a controller which inactivates part of the power supply circuit and/or at least part of an internal circuit of the data processing unit after completion of the image writing, thereby inhibiting electric power supply to the liquid crystal display.

For the reasons disclosed above for claim 1, claim 28 is not obvious with respect to Powell, Iwamoto, or Mio, either singly or in any combination. As claims 29 and 30 depend directly from non-obvious independent claim 28, they too are not obvious over the cited references, either singly or in any combination.

Accordingly, it is respectfully requested that the rejection of claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32 and 34 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Iwamoto and Mio, be reconsidered and withdrawn

The rejection of claims 3, 4, 7, 21 and 22 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Powell in view of Choi, is respectfully traversed based on the following.

Claim 3 is directed to a liquid crystal display device comprising:

a liquid crystal display which uses reflective type liquid crystal with a memory effect;

a driving circuit which performs image writing on the liquid crystal

display;

a data processing unit which is connected to the driving circuit, the data processing unit incorporating at least one central processing unit; and a controller which inactivates part of an internal circuit of the at least one central processing unit after completion of the image writing.

As discussed previously, Powell relates to a display which does not consume electric power to keep displaying an image thereon. As acknowledged on page 4 of the Office Action, “Powell does not disclose using a specific method for turning the power off in the display device”. Thus, Powell **does not disclose or suggest a controller which inactivates part of an internal circuit of the at least one central processing unit after completion of the image writing**. Therefore, claim 3 is not obvious with respect to the cited reference. As claims 4, 7, 21, and 22 depend either directly or indirectly from non-obvious independent claim 3, they too are not obvious with respect to Powell.

Choi relates to a technique to reduce the power consumption of a display which consumes electric power to keep displaying an image thereon (for example, a CRT). Thus, Choi teaches a different technique in a different field than Powell. Further, Choi **does not disclose or suggest a controller which inactivates part of an internal circuit of the at least one central processing unit after completion of the image writing**. Thus, claim 3 is not obvious with respect to Choi. As claims 4, 7, 21, and 22 depend either directly or indirectly from non-obvious independent claim 3, they too are not obvious with respect to the cited reference.

The Office Action states that it “would have been obvious to one of ordinary skill in the art to use Choi’s concept in Powell’s invention to turn the power off since Powell does not teach using any specific method for turning the power off”. As discussed above, Powell relates to a display which does not consume electric power to keep displaying an image thereon, while Choi relates to a technique to reduce the power consumption of a display which consumes electric power to keep displaying an image thereon. As Choi and Powell teach different techniques in different fields, it would not have been obvious to one of ordinary skill in the art to combine Powell and Choi. Further, as neither of the cited references disclose or suggest a same one of the required limitations of claim 3, claim 3 is

not obvious over a combination of the cited references. As claim 3 is not obvious over the cited references, either singly or in combination, claims 4, 7, 21, and 22, which depend either directly or indirectly therefrom, are also not obvious with respect to the cited references, either singly or in combination.

Accordingly, it is respectfully requested that the rejection of claims 3, 4, 7, 21 and 22 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Choi, be reconsidered and withdrawn.

The rejection of claims 19, 27, 35, 37, 38, 40, 41, 43, 44 and 46 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Powell in view of Mio, is respectfully traversed based on the following.

Claim 19 recites a portable electronic device comprising:

a liquid crystal display which uses reflective type liquid crystal with a memory effect;

a driving circuit which performs image writing on the liquid crystal display;

a power supply circuit which supplies electric power to the driving circuit;

a controller which inactivates at least part of the power supply circuit after completion of the image writing; and

a casing which encases the liquid crystal display, the driving circuit, the power supply circuit and the controller,

wherein the controller also inactivates at least part of an internal circuit of a data processing unit after completion of the image writing.

As acknowledged on page 5 of the Office Action, “Powell does not disclose using a specific method for turning the power off in the display device”. Further, Powell **does not** disclose or suggest a controller inactivating at least part of the power supply circuit after completion of the image writing. Thus, for that reason alone, claim 19 is not rendered obvious by Powell.

Mio teaches a process performed in the **middle** of image writing, while the device of claim 19 of the present application recites a process occurring after completion of

image writing. Mio **does not** disclose or suggest a controller inactivating at least part of the power supply circuit after completion of the image writing. Thus, for that reason alone, claim 19 is not rendered obvious by Mio.

As discussed above with respect to claim 1, as neither Powell nor Mio disclose or suggest a controller inactivating at least part of the power supply circuit after completion of the image writing, claim 19 is not obvious over a combination of the cited references. Moreover, as discussed above with respect to claim 1, even if the invention of Powell were combined with the method of Mio, the result would be very different from the portable electronic device of claim 19. Thus, for at least the reasons provided above with respect to claim 1, claim 19 is not obvious with respect to Powell or Mio, either singly or in combination.

Claim 27 recites a portable electronic device comprising:

- a liquid crystal display which uses reflective type liquid crystal with a memory effect;
- a driving circuit which performs image writing on the liquid crystal display;
- a power supply circuit which supplies electric power to the driving circuit;
- a controller which inactivates at least part of the power supply circuit after completion of the image writing; and
- a casing which encases the liquid crystal display, the driving circuit, the power supply circuit and the controller,
- wherein the reflective type liquid crystal includes a plurality of display areas.

As previously discussed, page 5 of the Office Action states, "Powell does not disclose using a specific method for turning the power off in the display device". Further, Powell **does not** disclose or suggest a controller inactivating at least part of the power supply circuit **after** completion of the image writing. Thus, for the reasons discussed above with respect to claim 1, claim 27 is not rendered obvious by Powell.

As previously discussed, Mio teaches a process performed in the middle of image writing. Mio **does not** disclose or suggest a controller inactivating at least part of the

power supply circuit **after** completion of the image writing. Thus, for the reasons discussed above with respect to claim 1, claim 27 is not rendered obvious by Mio.

As discussed above with respect to claim 1, a combination of Powell and Mio would not provide the portable electronic device according to claim 27. Thus, for at least the reasons provided for claim 1 above, claim 27 is not obvious over any combination of the cited references.

Claim 35 recites a liquid crystal display device comprising:

a liquid crystal display which uses reflective type liquid crystal with a memory effect;

a driving circuit which performs image writing on the liquid crystal display in response to a received write command;

a power supply circuit which supplies electric power to the driving circuit; and

a controller, which inactivates at least part of the power supply circuit after completion of the image writing, and which reactivates the inactivated part of the power supply circuit upon receiving another write command.

Claim 35 recites that at least part of the power supply circuit is inactivated after completion of the image writing.

As acknowledged on page 5 of the Office Action, “Powell does not disclose using a specific method for turning the power off in the display device”. Further, Powell **does not** disclose or suggest a controller inactivating at least part of the power supply circuit after completion of image writing. Thus, for at least the reasons presented above with respect to claim 1, claim 35 is not obvious with respect to Powell.

As discussed previously, Mio teaches a process performed in the **middle** of image writing. Mio **does not** disclose or suggest a controller inactivating at least **part** of the **power supply circuit** after completion of the image writing. Thus, claim 35 is not rendered obvious by Mio.

As discussed above with respect to claim 1, a combination of Powell and Mio would not provide the liquid crystal display device of claim 35. Thus, claim 35 is not obvious over the cited references, either singly or in combination. As claim 35 is not obvious, claim 37, which depends therefrom, is also not obvious with respect to the cited references, either singly or in combination.

Claim 38 recites a portable electronic device comprising:

a liquid crystal display which uses reflective type liquid crystal with a memory effect;

a driving circuit which performs image writing on the liquid crystal display in response to receipt of a write command;

a power supply circuit which supplies electric power to the driving circuit;

a controller which inactivates at least part of the power supply circuit after completion of image writing and which reactivates the inactivated part of the power supply circuit after another write command is received; and

a casing which encases the liquid crystal display, the driving circuit, the power supply circuit and the controller.

It is clear that the claim recites that at least part of the power supply circuit is inactivated after completion of the image writing. Thus, for at least the reason presented above with respect to claim 1, claim 38 is also not obvious with respect to the cited references, either singly or in combination. As claim 38 is not obvious with respect to the cited references, claim 40, which depends therefrom, is also not obvious with respect to the cited references, either singly or in combination.

Claim 41 recites a method for driving a liquid crystal display device provided with a liquid crystal display which uses reflective type liquid crystal with a memory effect, said method comprising the step of:

after receiving a write command and completing image writing on the liquid crystal display, inactivating at least part of a power supply circuit which supplies electric power to a driving circuit which performs image writing, and reactivating the inactivated part of the power supply upon receipt of another write command.

It is clear that the claim recites that at least part of the power supply circuit is inactivated after completion of the image writing. Thus, for at least the reason presented above with respect to claim 1, claim 41 is also not obvious with respect to the cited references, either singly or in combination. As claim 41 is not obvious with respect to the cited references, claim 43, which depends therefrom, is also not obvious with respect to the cited references, either singly or in combination.

Claim 44 recites a liquid crystal display device comprising:

a liquid crystal display which uses reflective type liquid crystal with a memory effect;

a driving circuit which performs image writing on the liquid crystal display in response to a received write command;

a data processing unit which is connected to the driving circuit;

a power supply circuit which supplies electric power to the driving circuit and the data processing unit, and

a controller which inactivates at least part of the power supply circuit and/or at least part of an internal circuit of the data processing unit after completion of the image writing, thereby inhibiting electric power supply to the liquid crystal display, and thereafter reactivating the inactivated part of the power supply circuit and/or at least part of the internal circuit of the data processing unit after receipt of another write command. Emphasis Added.

It is clear that the claim recites that at least part of the power supply circuit/ and or at least part of an internal circuit of the data processing unit is inactivated after completion of the image writing. Neither Powell nor Mio disclose or suggest that at least part of the power supply circuit/ and or at least part of an internal circuit of the data processing unit is inactivated after completion of the image writing.

Moreover, a combination of the two references would not provide a liquid crystal display device where at least part of the power supply circuit/ and or at least part of an internal circuit of the data processing unit is inactivated after completion of the image writing. Thus, claim 44 is not obvious with respect to the cited references, either singly or in combination. As claim 44 is not obvious with respect to the cited references, claim 46,

which depends therefrom, is also not obvious with respect to the cited references, either singly or in combination.

Accordingly, it is respectfully requested that the rejection of claims 19, 27, 35, 37, 38, 40, 41, 43, 44 and 46 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Mio, be reconsidered and withdrawn.

The rejection of claim 25 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Powell in view of Mio and Fitch, is respectfully traversed based on the following.

Claim 25 recites a portable electronic device comprising:

- a liquid crystal display which uses reflective type liquid crystal with a memory effect;
- a driving circuit which performs image writing on the liquid crystal display;
- a power supply circuit which supplies electric power to the driving circuit;
- a controller which inactivates at least part of the power supply circuit after completion of the image writing; and**
- a casing which encases the liquid crystal display, the driving circuit, the power supply circuit and the controller,
- wherein the liquid crystal display includes a pair of substrates accommodating the reflective type liquid crystal therebetween, and
- wherein at least one of the substrates is flexible.

It is clear that claim 25 recites inactivating part of the power supply circuit after completion of the image writing. As acknowledged on page 5 of the Office Action, "Powell does not disclose using a specific method for turning power off in the display device". Moreover, Powell **does not** disclose or suggest inactivating at least part of the power supply circuit after completion of the image writing. Thus, claim 25 is not rendered obvious by Powell.

Further, it is clear that claim 25 recites that at least one of the substrates is flexible. As acknowledged on page 6 of the Office Action, "Powell does not disclose the use of a

flexible substrate". Thus, for this reason as well, claim 25 is not obvious with respect to Powell

As discussed previously, Mio **does not** disclose or suggest inactivating at least **part of the power supply circuit** after completion of the image writing. Additionally, Mio **does not** disclose the use of a flexible substrate. Thus, claim 25 is not rendered obvious by Mio.

Fitch discloses a flexible substrate. Fitch **does not** disclose or suggest inactivating at least **part of the power supply** after completion of the image writing. Thus, claim 25 is not rendered obvious by Fitch.

As discussed above, there is no suggestion or motivation to combine Powell and Mio, nor would such a combination provide the portable electronic device according to claim 25. While Fitch discloses a flexible substrate, Fitch provides no motivation or suggestion to combine with any of the cited references, nor would the addition of Fitch provide the portable electronic device according to claim 25. Thus, claim 25 is not obvious over any of the cited references, either singly or in any combination.

Accordingly, it is respectfully requested that the rejection of claim 25 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Mio and Fitch, be reconsidered and withdrawn.

The rejection of claim 33 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Powell in view of Iwamoto and Mio as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32 and 34 above, and further in view of Fitch, is respectfully traversed based on the following.

Claim 33 depends indirectly from independent claim 15 through dependent claim 24. Claim 15 recites a portable electronic device comprising:

a liquid crystal display which uses reflective type liquid crystal with a memory effect;

a driving circuit which performs image writing on the liquid crystal display;

a power supply circuit which supplies electric power to the driving circuit, the power supply circuit including one element selected from the group consisting of a booster circuit and a DC/DC converter;

a controller which inactivates at least part of the power supply circuit after completion of the image writing; and

a casing which encases the liquid crystal display, the driving circuit, the power supply circuit and the controller.

Claim 15 recites that a controller inactivates at least part of the power supply circuit after completion of the image writing. Thus, for at least the reasons disclosed above for claim 1, claim 15 is not obvious with respect to Powell, Iwamoto, or Mio, either singly or in any combination. As claim 33 depends indirectly from non-obvious independent claim 15, it too is not obvious over any of the cited references, either singly or in any combination.

Fitch teaches a flexible substrate and does not teach any processes after completion of image writing. Further, Fitch **does not** disclose or suggest a controller inactivating at least part of the power supply circuit after completion of the image writing. Thus, claim 15 is not rendered obvious by Fitch.

Moreover, even if there were found suggestion or motivation to combine Powell, Iwamoto, and Mio, and further to combine Fitch, the combination would not provide the portable electronic device of claim 25. Thus, claim 15 is not obvious over any combination of the cited references. As claim 33 depends indirectly from non-obvious independent claim 15, it too is not rendered obvious by the cited references, either singly or in any combination.

Accordingly, it is respectfully requested that the rejection of claim 33 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Iwamoto and Mio as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32 and 34 above, and further in view of Fitch, be reconsidered and withdrawn.

The rejection of claims 36, 39, 42 and 45 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Powell in view of Mio as applied to claims 19, 27, 35, 37, 38, 40, 41, 43, 44 and 46 above, and further in view of Iwamoto, is respectfully traversed based on the following.

Claims 36, 39, 42, and 45 depend directly from independent claims 35, 38, 41, and 44, respectively. As discussed above, claims 35, 38, 41, and 44, are not obvious with respect to Powell and Mio either singly or in combination. For the reasons presented above for claims 35, 38, 41, and 44 with respect to Powell and Mio, both singly and in combination, claims 36, 39, 42, and 45 respectively, are also not obvious with respect to Powell and Mio, either singly or in combination.

As discussed above, Iwamoto **does not** teach any process **after** completion of image writing. Moreover, Iwamoto **does not** disclose or suggest inactivating at least part of the power supply circuit after completion of the image writing. Thus, claims 35, 38, 41, and 44 are not rendered obvious by Iwamoto. As claims 36, 39, 42, and 45 respectively depend directly from the non-obvious independent claims listed above, they too are not rendered obvious with respect to Iwamoto.

Moreover, a combination of the above cited references would not provide the method or devices of claims 35, 38, 41, or 44. Thus, claims 35, 38, 41, and 44, and thereby claims 36, 39, 42, and 45, which depend respectively therefrom, are not rendered obvious by the cited references, either singly or in any combination.

Accordingly, it is respectfully requested that the rejection of claims 36, 39, 42 and 45 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Powell in view of Mio as applied to claims 19, 27, 35, 37, 38, 40, 41, 43, 44 and 46 above, and further in view of Iwamoto be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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